Applicant : Richard G. Vile et al.
Serial No. : 10/533,613
Filed : January 30, 2006
Page : 2 of 8

Attorney's Docket No.: 07039-444US1 / MMV-01-124

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.   (Cancelled).

2.   (Currently amended) The vector of claim [[1]] 5, wherein said target cell is a tumor cell.

Claims 3-4. (Cancelled).

5.   (Currently amended) A viral vector comprising a nucleic acid encoding a therapeutic polypeptide, wherein said nucleic acid is operably linked to a heterologous destabilizing element, wherein upon introduction of said vector into a target cell, expression of said therapeutic polypeptide encoded by said nucleic acid is enhanced in said target cell relative to the expression of said therapeutic polypeptide in a non-target cell into which said vector has been introduced The vector of claim 4, wherein said heterologous destabilizing element is the 3' untranslated region of the tumor necrosis factor alpha gene.

Claims 6-10. (Cancelled).

11.   (Currently amended) A viral vector comprising a nucleic acid encoding a therapeutic polypeptide, wherein said nucleic acid is operably linked to a heterologous destabilizing element, wherein upon introduction of said vector into a target cell, expression of said therapeutic polypeptide encoded by said nucleic acid is enhanced in said target cell relative to the expression of said therapeutic polypeptide in a non-target cell into which said vector has been introduced

~~The vector of claim 9~~, wherein said heterologous destabilizing element is the 3' untranslated region of the urokinase plasminogen activator receptor gene.

Claims 12-22. (Cancelled).

23.   (New) A method for making a viral vector, wherein said method comprises:
         (a) obtaining a nucleic acid identified as being a heterologous destabilizing element, and
         (b) forming a viral vector comprising said nucleic acid operably linked to a nucleic acid encoding a therapeutic polypeptide.

24.   (New) The method of claim 23, wherein said heterologous destabilizing element is radiation responsive.

25.   (New) The method of claim 23, wherein said heterologous destabilizing element is responsive to inflammatory mediators.

26.   (New) The method of claim 23, wherein said heterologous destabilizing element is the 3' untranslated region of the tumor necrosis factor alpha gene.

27.   (New) The method of claim 23, wherein said heterologous destabilizing element is stabilized in proliferating cells.

28.   (New) The method of claim 23, wherein said heterologous destabilizing element is responsive to activated RAS and elevated P-MAPK activity.

29.   (New) The method of claim 23, wherein said heterologous destabilizing element is the 3' untranslated region of the cyclooxygenase 2 gene.

30.   (New) The method of claim 23, wherein said heterologous destabilizing element is responsive to hypoxic conditions.

31.   (New) The method of claim 30, wherein said heterologous destabilizing element is the 3' untranslated region of the vascular permeability factor/vascular endothelial growth factor gene.

32.   (New) The method of claim 30, wherein said heterologous destabilizing element is the 3' untranslated region of the urokinase plasminogen activator receptor gene.

33.   (New) A method for making a conditionally replication competent viral vector, wherein said method comprises:
    (a) obtaining a nucleic acid identified as being a heterologous destabilizing element, and
    (b) operably linking said nucleic acid to an essential gene of said viral vector.

34.   (New) The method of claim 33, wherein upon introduction of said vector into a target cell, expression of the essential gene product encoded by said essential gene is enhanced in said target cell relative to the expression of the essential gene product in a non-target cell into which said viral vector has been introduced.

35.   (New) The method of claim 34, wherein said target cell is a tumor cell.

36.   (New) The method of claim 33, wherein said viral vector is an adenoviral vector.

37.   (New) The method of claim 33, wherein said essential gene is E1A.

38.   (New) The method of claim 33, wherein said viral vector is a vaccinia virus vector.